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# The wise use of electricity

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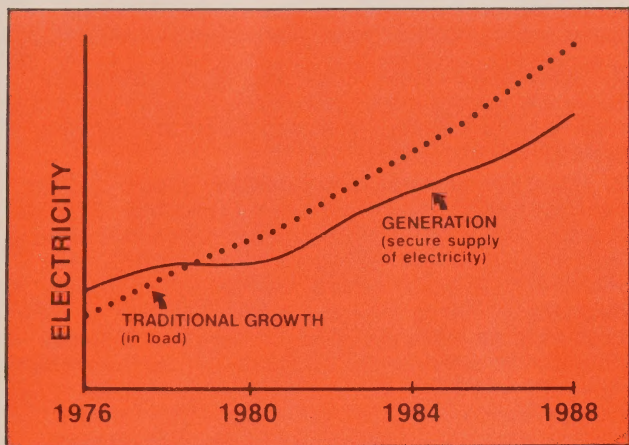


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# Why it is important to save electricity

Ontario's need for energy increases by about 7% per year. More people, more homes, more uses for electricity. Today, in an economy of tight money and rising costs, it is no longer possible to keep expanding generation and distribution facilities to keep pace with such rapid growth. By 1980, if we continue to expand at the 7% rate, there could be shortages of electricity. Conservation and wise use can help avoid this unpleasant prospect.



And conservation can help husband valuable natural resources. About 40% of Ontario's electricity is generated by burning dwindling fossil fuels — oil, coal and natural gas — which are much in demand for transportation, chemicals, fertilizers, and other important uses.

At home and at work — it makes good sense to conserve electricity and all forms of energy.

# Heating

Ideas to help you make better use of electricity in whatever kind of heating system you use.

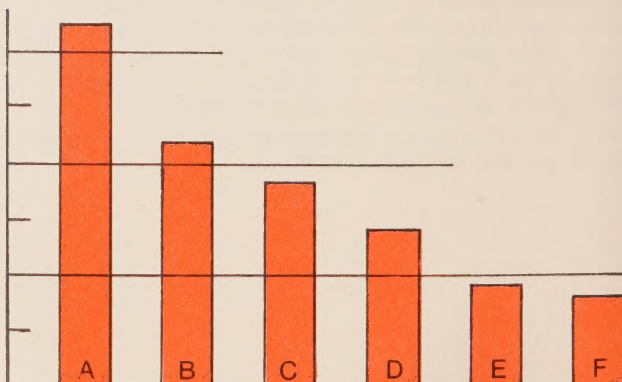
**1. Set your Thermostat at 66° or 68° F (18.9° C - 20° C)**

For every degree temperature above the recommended setting your heating fuel will rise by about 1.3 per cent. And setting a thermostat higher than normal won't take your home to the required temperature any faster. If everyone is at work or at school during the day, or away at weekends, set the thermostat down to 63°. It makes sense to keep the heat down when nobody's home.

**2. Never place a lamp, TV set or other heat producing appliance near the thermostat.** Rising heat can give a false reading to the heating system and cause room temperatures to be lower than you set.

**3. Have your entire heating system checked** before the heating season. A neglected heating system is inefficient and may let you down. Once a month, take a look at the air filter in a central room air system. A thorough monthly vacuuming can extend normal filter life up to 3 months. A dust clogged filter means your system has to work much harder and wastes fuel. Keeping filters clean will allow more heat to pass through the system. Some 'permanent' type filters can be washed and re-used for more than one heating season.

**4. Make sure your home has enough insulation.** It takes almost **twice as much fuel** to heat an uninsulated home.





In an older home the insulation may have settled or deteriorated. Proper insulation in your home can reduce heating cost. Even if you cannot insulate between the walls of your home, be sure to add the benefit of ceiling insulation. Ceiling insulation can make an impressive difference to your winter comfort and your heating bill. The chart shows the effect of insulation in heating an average 1000 square foot home:

- (A) No insulation.
- (B) 3 inches of mineral wool over ceilings only.
- (C) 3 inches of mineral wool over ceilings and 2 inches of insulation in walls.
- (D) 3 inches in insulation over ceilings and 2 inches of insulation in walls and under floors over unheated areas.
- (E) 3 inches of insulation over ceilings, in walls and under floors, and with storm windows and doors.
- (F) 6 inches of insulation over ceilings and 3 inches of insulation in walls and under floors, and with storm windows and doors.

**5. Caulk cracks around the door and window frames.** you should also have well fitted storm doors, windows and ensure that weather-stripping is installed. Storm doors and windows reduce heat loss up to 15% .

**6. Keep heating registers and cold air returns clean and clear.** Putting furniture over or in front of a heat source interferes with natural circulation and the heated air may discolour light fabrics and synthetics.

**7. Don't heat space you're not using.** Close doors leading to unheated parts of the house. If you have a spare room that's not being used, shut off the heat and close the door.

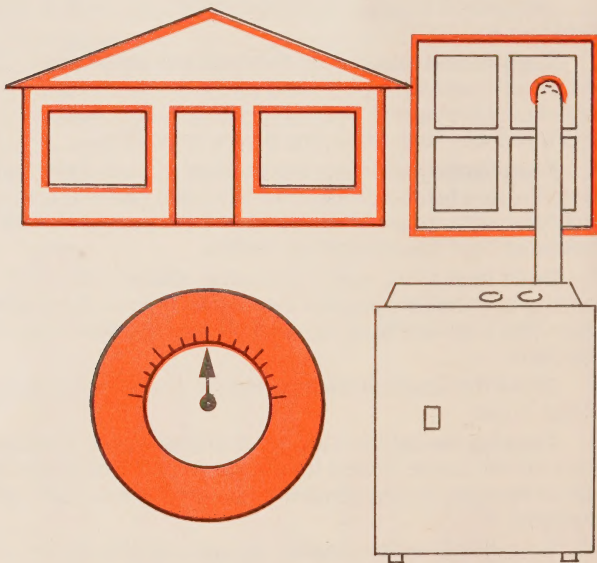
**8. Close the fireplace damper** tightly when the fireplace is not in use.

**9. Drawing the curtains is a form of insulation.** Windows are a prime source of heat loss — draperies form a barrier. On sunny days let the sunshine in — on dull days draw the curtains.

**10. Keep doors to the outside, garage and attic firmly shut.**

# Cooling

1. **Proper insulation** is important in keeping your home cool. Follow the ideas outlined under "Heating". And make sure the window air conditioning unit fits tightly into the window opening.
2. **Air conditioners have filters** that should be checked and cleaned regularly. Not only to conserve electricity, but to keep the air in your home free from dust and pollens.
3. **Electric lights and appliances** generate heat. Make sure they're turned off when not in use.
4. **Make sure the clothes dryer is vented outdoors** when air conditioning is required.
5. **Keep windows** and outside doors completely closed while your cooling unit is operating.
6. Turn your air conditioner off before you go on vacation.



# Kitchen

You use more electricity in your kitchen than in any other room in your house. There's a lot you can do to conserve here.

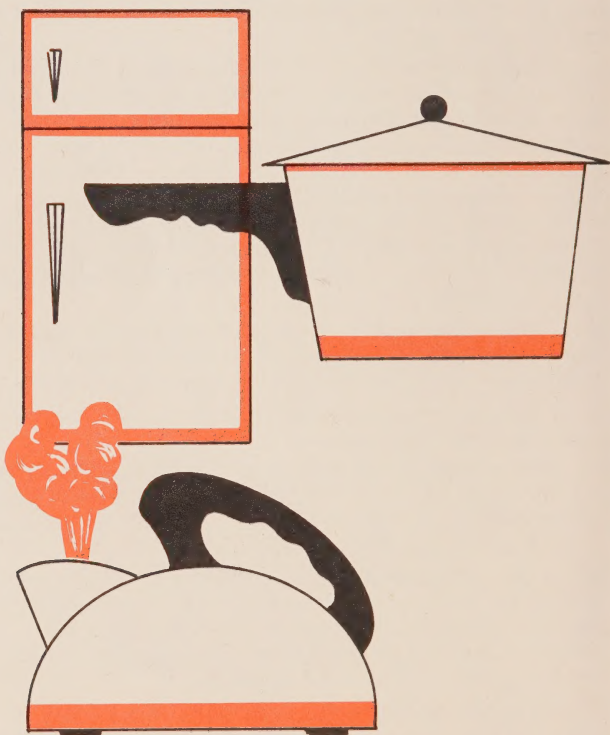
1. **When cooking vegetables** — don't drown them — about  $\frac{1}{2}$  a cup of water is usually plenty — and cook only until tender. You'll save vitamins and the food will taste and look better. If you use too much water then you'll be using unnecessary energy in bringing the water to a boil.
2. **Use tight fitted sauce pan lids** to keep the heat inside. Start to boil water on a 'high' setting, then reduce to 'low' or 'simmer'. The food won't cook any faster on 'high', you'll just use more energy and produce more heat.
3. **Pick a pan** that fits the element. This will avoid waste heat escaping from around the edges. Keep the lid on the pan for faster heating.
4. **Consider the oven** for whole meal cooking. Pick foods that cook in the same time at the same temperature. And don't open up the oven door for a quick peek unless you have to — heat escapes quicker than you think. Pre-heating is often unnecessary. Generally any food requiring more than a full hour of cooking time may be placed in a cold oven. If you're cooking a roast you can save energy by turning off the heat about 30 minutes before its finished. The remaining heat should be enough to finish the job.
5. **Toast in the toaster.** The oven is wasteful for such a minor task. When boiling water for one cup of tea or coffee don't fill the kettle and boil more than you need.
6. **Never use the oven** to heat a kitchen. A small space heater will use less energy.
7. **Always double check** to make sure surface elements are turned off after use. You can often turn off the units up to five minutes ahead of time — and let the food continue to cook as the heat diminishes.
8. **If your refrigerator needs defrosting**, do it before the ice deposit reaches  $\frac{1}{4}$ " thickness. ice acts as unwanted insulation, reduces cooling power and will raise the temperature in the freezer section. A refrigerator should not be set to run colder than necessary.
9. **Be sure your refrigerator** is air tight. A good test — close the door on a piece of ordinary paper. If the paper is

easy to pull out, then you're wasting cold air. Replace the gasket.

10. **Never open the refrigerator door** more often than necessary.

11. **A refrigerator** should be installed away from direct warm spots. Allow enough room along the sides and at the back for free air circulation. Poor air circulation places a burden on the cooling system since heat cannot be dissipated.

12. **Overcrowding a refrigerator** interferes with normal air circulation inside and will tend to overwork the refrigerator to maintain a cold temperature.





# Other Appliances

Reading the manufacturers instructions is a basic way to prevent wasting energy and ensure top performance.

1. **Run a dishwasher** only when there's a full load to be done. In the meantime, use it to store dishes and cutlery until you're ready to wash. This way you'll need fewer washes and save hot water. Pre-rinse with cold water so food won't stick. In winter, remember to avoid running a dishwasher during the highest energy demand periods - 4 p.m. to 7 p.m. Leave dishwashing until later in the evening, or the following morning.

2. **Let dishes air dry.** The dishwasher has a heating element to dry the dishes after wash cycle is complete. Stop the cycle before the element comes on and open the door. The hot dishes will dry by themselves and save electricity.

3. **If your clothes washer has** a water level selector, choose the correct setting for the size of the load. Remember that only sufficient water is necessary for good results.

4. **An automatic washer goes through** the same cycle for a full load or a single sock. The more you plan your wash for full loads, the more electricity and hot water you save. Varying the size of garments in each full load allows freer circulation — improves cleaning action.

5. **Special features.** Some special features help conserve energy. A soak cycle loosens stubborn stains so you only have to wash heavily soiled clothes once.

6. **Clean the lint filter** on a clothes dryer. Since dryers are big energy users avoid using them during the critical demand period — winter evenings 4-7 p.m.

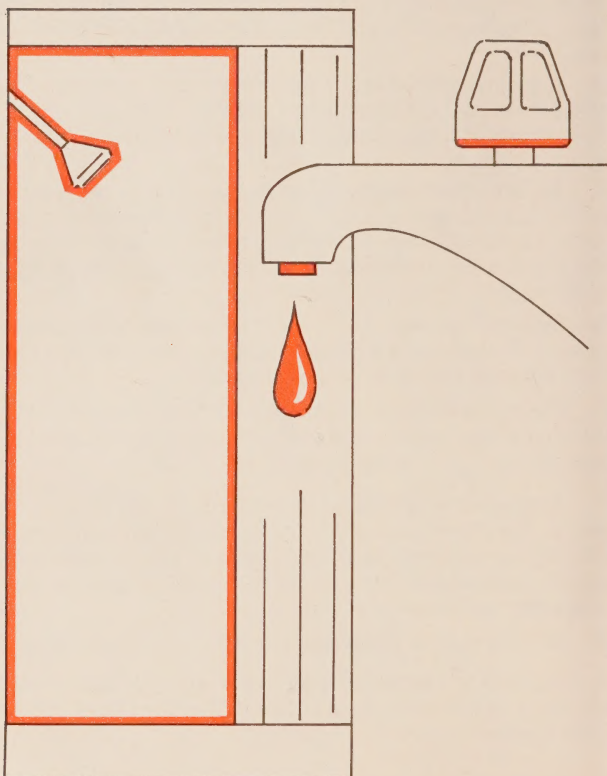
7. **The major cost item** in washing clothes is hot water. The more wash you do in cold or cold/warm cycles the more energy you save. For example: permanent-press items need only warm water. Cold water can be used for washable woollens.

8. **An unwatched television set** left on wastes energy.

9. **Replace or empty the dust bag** in your vacuum cleaner regularly. If too much dust collects, the motor will be placed under a strain

# Hot water

1. A dripping hot tap or shower head can be a source of waste. One drop a second adds up to about 175 gallons a month down the drain. A simple tap washer conserves hot water.
2. **Take a shower not a bath.** The average hot bath takes more hot water than the average shower.
3. **Long pipe** runs between the water heater and the taps should be wrapped with insulation, if practical.
4. **Help avoid adding to the winter peak demand periods** — 4 p.m. to 7 p.m. Take your bath or shower before bedtime.



# Lighting

Here are some ideas for using lighting to its best advantage.

1. **Use lower wattage bulbs** — is that 100 watt bulb really necessary or could you manage just as well with a 60?
2. **Keep bulbs and fixtures clean.** Almost unnoticed layers of dust will lower the lighting level.
2. **Avoid glare.** It can tire your eyes in a hurry. Be sure light bulbs are shaded, and lighting equipment properly placed so that it doesn't reflect on television screens and other shiny surfaces.
3. **Contrast is another** eye strainer. Avoid it by using lamps and shades that send light upwards as well as downwards, and are wide enough at the bottom to spread light over a wide area.
4. **In addition** Lamp shades should conceal light bulbs when standing and when you're seated. Shades should have a white or near-white lining to reflect light, they should be dense enough to keep the bulb from glaring.
5. **Turning off the lights** when they're not needed, a lot of homeowners forget to do this.
6. Keep christmas lighting to a modest display. Don't put them up too far ahead of christmas. Do not turn them on until after 7 p.m., when the winter demand is less great — and remember to turn them off at bedtime.
7. **When re-decorating** consider light colours on ceilings and walls. Light colours reflect more light and it could mean that you'll need fewer lamps or lamps of lower wattage.
8. **The economy of fluorescent lamps** for business and industrial purposes has been recognized for years. A 40-watt fluorescent lamp produces more light than a 100 watt incandescent bulb — and at less cost. When adding light consider fluorescent fixtures.

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